

Amendments to the Claims:

1. (Currently amended) A shaft mountable member for mounting on a rotatable shaft and adjacent a face of a second member, the shaft mountable member comprising:

a body portion defining a planar first side, a second side, and a bore perpendicular to the first side, the bore extending between the first and second sides for receiving the shaft therethrough,

wherein the first side defines a plurality of grooves extending radially between the bore and an outer perimeter of the first side, each of the grooves providing a fluid passage between the bore and the outer perimeter, each groove being defined by a sidewall that extends from the planar first side of the body portion at an angle directed more in a direction perpendicular to the first side than a direction parallel to the first side, such that fluid is communicated between the bore and the outer perimeter through the grooves without generating significant thrust loading on the second member.

2. (Original) A shaft mountable member according to Claim 1 wherein the second side defines a plurality of grooves extending radially between the bore and an outer perimeter of the second side, each of the grooves on the second side providing a fluid passage between the bore and the outer perimeter such that fluid is communicated between the bore and the outer perimeter through the grooves on the second side when the second side is positioned adjacent a third member without generating significant thrust loading on the third member.

3. (Original) A shaft mountable member according to Claim 1 wherein the shaft mountable member is a bearing.

4. (Original) A shaft mountable member according to Claim 1 wherein the first side defines at least 15 of the radial grooves.

5. (Original) A shaft mountable member according to Claim 1 wherein each radial groove has a depth of less than about 0.025 inches.

6. (Original) A shaft mountable member according to Claim 1 wherein the combined cross-sectional area of the grooves is at least about 0.003 square inches.

7. (Original) A shaft mountable member according to Claim 1 wherein the grooves are formed by pressing a die against the shaft mountable member, the die defining a contoured surface corresponding to the shape of the grooves.

8. (Currently amended) A turbocharger comprising:  
a center housing defining a cavity therethrough and a fluid passage in communication with the cavity;  
at least one bearing positioned in the cavity of the center housing, the bearing defining first and second opposite faces and defining a bore therethrough;  
a rotatable shaft extending through the bore of the bearing and defining first and second ends at opposite sides of the center housing;  
a compressor connected to the first end of the shaft and configured to rotate with the shaft, the compressor defining a face adjacent the first face of the at least one bearing;  
a turbine connected to the second end of the shaft and configured to rotate with the shaft and the compressor, the turbine defining a face adjacent the second face of the at least one bearing;  
wherein at least one of the faces of the bearing defines a plurality of grooves extending radially between the bore and an outer perimeter of the bearing, each of the grooves providing a fluid passage between the bore and the outer perimeter and the compressor and turbine being axially restrained relative to the housing separately from the bearing such that fluid is communicated between the bore and the outer perimeter through the grooves without generating significant thrust loading on the compressor and turbine.

9. (Original) A turbocharger according to Claim 8 wherein the second side defines a plurality of grooves extending radially between the bore and an outer perimeter of the second side, each of the grooves on the second side providing a fluid passage between the bore and the

outer perimeter such that fluid is communicated between the bore and the outer perimeter through the grooves on the second side when the second side is positioned adjacent a third member without generating significant thrust loading on the third member.

10. (Original) A turbocharger according to Claim 8 wherein the first side defines at least 15 of the radial grooves.

11. (Original) A turbocharger according to Claim 8 wherein each radial groove has a depth of less than about 0.025 inches.

12. (Original) A turbocharger according to Claim 8 wherein the combined cross-sectional area of the grooves is at least about 0.003 square inches.

13. (Original) A turbocharger according to Claim 8 wherein the grooves are formed by pressing a die against the bearing, the die defining a contoured surface corresponding to the shape of the grooves.

14. (Original) A turbocharger according to Claim 8 wherein two of the bearings are positioned on the shaft with a spacer on the shaft therebetween, each of the bearings defining a plurality of the grooves on a respective face.

15. (Original) A turbocharger according to Claim 14 wherein each of the bearings defines a plurality of the grooves on each face thereof.

16. (Currently amended) An elongate shaft for receiving a relatively rotatable member, the shaft comprising:

a first portion having an outer surface defining a first diameter, the first portion being configured for receiving the rotatable member;

a second portion having an outer surface defining a second diameter larger than the first diameter, the second portion being adjacent the first portion;

a shoulder surface extending radially between the outer surfaces of the first and second portions, the shoulder surface defining a plurality of grooves extending radially between the outer surfaces of the first and second portions, each of the grooves providing a radial fluid passage between the shoulder surface and the relatively rotatable member such that fluid is communicated through the grooves without generating significant thrust loading for axially restraining the shaft and the relatively rotatable member between the shoulder surface and the relatively rotatable member.

17. (Original) A shaft according to Claim 16 wherein the shoulder surface defines at least 15 of the radial grooves.

18. (Original) A shaft according to Claim 16 wherein each radial groove has a depth of less than about 0.025 inches.

19. (Original) A shaft according to Claim 16 wherein a combined cross-sectional area of the grooves is at least about 0.003 square inches.

20. (Original) A shaft according to Claim 16 wherein the grooves are formed by pressing a die against the shoulder surface, the die defining a contoured surface corresponding to the shape of the grooves.

21-26. (Cancelled)

27. (Currently amended) A method for circulating a lubricant between a shaft member on a shaft and an adjacent face of a second member, the method comprising:

providing the shaft member on the shaft, the shaft member defining a first side, a second side, and a bore extending between the first and second sides for receiving the shaft therethrough;

providing the second member adjacent the first side of the shaft member;

circulating a fluid radially into one or more holes extending from a radially outer surface of the shaft member to the bore such that substantially all of the fluid supplied into the one or more radial holes is delivered by the holes into the bore; and

circulating the [[a]] fluid radially through a plurality of grooves on the first side of the shaft member between the bore and an outer perimeter of the first side such that the fluid is communicated between the bore and the outer perimeter through the grooves without generating significant thrust loading between the shaft member and the second member for axially restraining the shaft member and the second member.

28. (Original) A method according to Claim 27 further comprising providing a third member adjacent the second side of the shaft member, and circulating the fluid radially through a second plurality of grooves on the second side of the shaft member between the bore and an outer perimeter of the second side such that the fluid is communicated between the bore and the outer perimeter of the second side through the second plurality of grooves without generating significant thrust loading between the shaft member and the third member.

29. (Previously presented) A shaft mountable member according to Claim 1 wherein the bore defines first portions adjacent each of the first and second sides, and a second portion between the first portions, the second portion of the bore having a smaller diameter than the first portions.

30. (Previously presented) A turbocharger according to Claim 8 wherein the bore of the bearing defines first portions adjacent each of the first and second faces, and a second portion between the first portions, the second portion having a smaller diameter than the first portions.

31. (Previously presented) A shaft mountable member for mounting on a rotatable shaft and delivering fluid between an outer surface of the member and the shaft, the shaft mountable member comprising:

a body portion defining a first side, a second side, a bore extending between the first and second sides for receiving the shaft therethrough, and one or more radial holes extending from a

radially outer surface of the body portion to the bore, the body portion being configured such that all fluid supplied into the one or more radial holes is delivered by the holes into the bore,

wherein the first side defines a plurality of grooves extending radially between the bore and an outer perimeter of the first side, each of the grooves providing a fluid passage between the bore and the outer perimeter such that fluid is communicated between the bore and the outer perimeter through the grooves.

32. (Previously presented) A shaft mountable member according to Claim 31 wherein the second side defines a plurality of grooves extending radially between the bore and an outer perimeter of the second side, each of the grooves on the second side providing a fluid passage between the bore and the outer perimeter such that fluid is communicated between the bore and the outer perimeter through the grooves on the second side.

33. (Previously presented) A shaft mountable member according to Claim 31 wherein the shaft mountable member is a bearing.

34. (Previously presented) A shaft mountable member according to Claim 31 wherein the first side defines at least 15 of the radial grooves.

35. (Previously presented) A shaft mountable member according to Claim 31 wherein each radial groove has a depth of less than about 0.025 inches.

36. (Previously presented) A shaft mountable member according to Claim 31 wherein the combined cross-sectional area of the grooves is at least about 0.003 square inches.

37. (Previously presented) A shaft mountable member according to Claim 31 wherein the grooves are formed by pressing a die against the shaft mountable member, the die defining a contoured surface corresponding to the shape of the grooves.